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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/611,309	06/30/2003	R. Hugo Patterson	DDOMP003	3973
21912	7590	05/19/2006	EXAMINER	
VAN PELT, YI & JAMES LLP 10050 N. FOOTHILL BLVD #200 CUPERTINO, CA 95014			PATEL, KAUSHIKKUMAR M	
			ART UNIT	PAPER NUMBER
			2188	
DATE MAILED: 05/19/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/611,309	<b>Applicant(s)</b> PATTERSON, R. HUGO	
	<b>Examiner</b> Kaushikkumar Patel	<b>Art Unit</b> 2188	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 03/09/2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 and 26-31 is/are rejected.
- 7) ☒ Claim(s) 21-25 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

1. This Office Action is in response to Applicant's communication filed March 9, 2006 in response to PTO office action mailed October 6, 2005. The Applicant's remarks and amendments to the claims and/or specification were considered with the results that follow.
2. In response to the last office action, claims 12 and 23-25 have been amended. No claims have been added or canceled. As a result, claims 1-31 remain pending in this application.
3. The objections and rejection of claims 23-25, and 12, 16 and 21-25 under 35 U.S.C. 112 first and second paragraphs have been withdrawn due to amendments filed to the claims and clarification provided (remarks page 10, paragraphs 2 and 3).

### ***Response to Arguments***

4. Applicant's arguments filed March 9, 2006 with respect to claims 1-31 have been fully considered but they are not persuasive.
5. Applicant argues that Kanfi fails to teach "in the event that the data segment is determined not to have been previously stored, generating unique identifier for specifying the data segment in a representation of the data stream". Examiner respectfully disagrees with this. As from fig. 7, first decision block, Kanfi teaches that if previous version of the file is not stored in archive memory than send a copy of file block

with associated block numbers (identifiers) to archive. Also on column 3, lines 30-35 teaches that file F1 is a new file, a copy of which had not been stored previously, then computer passes block forming file F1 to archives.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1,7, 12-13, 20, 26, and 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanfi (5,559,991) in view of Hudson et al. (US 2003/0204605 A1)

As per claims 1 and 30, Kanfi teaches: a method for processing a data stream comprising (figure 7): receiving a data segment (see abstract, a facility for storing in a backup memory stores blocks of memory sent by computers); determining whether data segment has been previously stored (figure 7, as taught by checking previous version of file stored in archive memory?); in the event the data segment is determined not to have been previously stored, generating an identifier (signature) for specifying the data segment in a representation of data stream (figure 7, column 3, lines 22-30).

Kanfi teaches assigning an identifier but fails to teach unique identifier. Hudson teaches assigning unique identifier to data segment (paragraph [0034]).

It would have been obvious to one of ordinary skill in the art at the time of invention to assign sequence identifier as taught by Hudson in the method of Kanfi in order to be able to reassemble the data segments for easier data retrieval. (Hudson, paragraph [0034]).

As per claim 7, Kanfi teaches a storing a data block in data segment storage (figure 3).

As per claims 12-13, Kanfi teaches assigning a block number (figure 3, items 302,303 etc. column 4, lines 3-6), and serial number is shorter than signature of the data segment.

As per claim 20 and 26, Kanfi teaches a data representation including storing signatures (column 3, lines 22-30) and also teaches signatures are applied for restoring a file (see abstract) and teaches a reconstruction list.

Claim 29 is rejected for the same reasons applied to claims 1 and 7, wherein Kanfi teaches storing of data segment if it is determined not to have stored previously.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-5,8-11,14-15,17-18, 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanfi (5,559,991) in view of Hudson et al. (US 2003/0204605 A1) as applied to claims 1 and 7 above, and further in view of applicant's admitted prior art (herein after APA).

As per claims 2-3,14,15,17,18 the difference between Kanfi and the claims is that the claims recite generating content derived summary, fingerprint. Kanfi and Hudson fail to teach generating a fingerprint or content derived summary; however Kanfi teaches generating signature (column 3, lines 14-21). As per APA (page 1, lines 10-20), the identifier may have been composed in many different ways. Accordingly, it would have been obvious to one of ordinary skill in the art at the time of invention to use content derived summary or fingerprint in the system of Kanfi and Hudson to make the data system more collision free.

As per claim 4, according to APA there is a possibility of collision using content derived identifiers, generating a wider range of identifier lowers the probability of collision (page 2, lines 1-5). It would have been obvious to one of ordinary skill in the art at the time of invention to store data segments itself instead of storing both content derived identifier and data segment in the system of Kanfi and Hudson to conserve the space of storage device.

As per claim 5, Kanfi teaches, whether the data block previously stored, comparing the previously stored signature (figure 2) to newly generated signature

(column 3, lines 38-50). Thus Kanfi teaches locating of content derived summary to compare the old and new signatures.

Claim 8 is rejected for the same reasons as applied to claims 1-7, as Kanfi teaches a method for processing a data stream wherein determining whether the data segment previously stored includes generating a content derived summary (claims 1-2); in the event that data segment is determined not to have been previously stored, further including: storing the data segment in the data segment storage location; and updating a data structure for storing the content derived summary, the unique identifier, and the data storage location (see figure 3, which shows content derived summary table created for new data blocks and updating of table, column 3, lines 22-30, figure 3, shows block identifiers and data blocks stored in the data segment storage)

As per claim 9, Kanfi teaches the storing of data blocks and identifiers on the tables in archive memory (figure 3), thus Kanfi inherently teaches accessing the storage location.

As per claims 10-11, Kanfi teaches all the tables and archives can be implemented at one storage location and hence teaches the single access of storage location and a region of the data structure. (column 8, lines 27-30).

Regarding claims 27 and 28, applicant's admitted prior art teaches that in the event that data segment found to be previously stored, the identifier is stored instead of data segment in the data sequence. Thus APA inherently teaches locating of identifier previously assigned to the data segment (claim 27) and storing of identifier (claim 28) in reconstruction list (specification page 1, lines 15-18).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 6 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanfi (5,559,991) in view of Hudson et al. (US 2003/0204605 A1) as applied to claim 1 above, and further in view of Shnelvar (US 6,374,266).

As per claim 6, Kanfi teaches determining whether the data segment has been previously stored. Kanfi and Hudson fail to teach locating data segment. Shnelvar teaches locating data segment and comparing the data (column 19, lines 1-3). It would have been obvious to one having ordinary skill in the art at the time of invention to use the method of data comparison of Shnelvar with the method of Kanfi and Hudson to avoid collision. (column 18, lines 41-50).

As per claim 19, Shnelvar teaches use of compressed data. It would have been obvious to one having ordinary skill in the art at the time of the invention to use compressed data with the system of Kanfi and Hudson to eliminate duplicate clusters of data source and hence save storage space (column lines 56- 65).



***Allowable Subject Matter***

7. Claims 21-25 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kaushikkumar Patel whose telephone number is 571-272-5536. The examiner can normally be reached on 8.00 am - 4.30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mano Padmanabhan can be reached on 571-272-4210. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
KMP

Kaushikkumar Patel  
Examiner  
Art Unit 2188

  
3/12/06

MANO PADMANABHAN  
SUPERVISORY PATENT EXAMINER